

Georgia Department of Natural Resources

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Environmental Protection Division

404/656-4713

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MEMORANDUM

TO: Jennifer Kaduck
FROM: Randall O. Manning, Ph.D., DABT
DATE: June 20, 2003
RE: Coosa fish

Measurements of PCBs in the late 1970's revealed concentrations of PCBs in fish greater than 30 parts per million (ppm) in some instances. The Food and Drug Administration's (FDA) Action Level for PCBs at that time was 5.0 ppm, but was officially changed to a Tolerance Level of 2.0 ppm in 1984. From 1977 to 1991, PCB concentrations in fish tissue were monitored extensively in the Coosa River. A statistician designed the monitoring strategy so that significant changes in PCB concentrations could be determined. Each year approximately 45 individual channel catfish (about 1 pound in size) were collected for analysis of fillet tissue. From 1977 to 1984, the concentrations of PCBs monitored in catfish from the Coosa River decreased dramatically from concentrations greater than 30 ppm to less than 2 ppm. After 1984, the changes in PCB concentration on a year by year basis were not as dramatic, but continued to decline to an average concentration of 0.78 ppm in 1991. A summary by year and average PCB concentration in mg/kg or ppm is shown below:

catfish, approximately 1 lb.

1977 - 36.65	1984 - 1.99
1978 - 34.94	1985 - 1.03
1979 - 30.06	1986 - 1.10
1980 - 17.30	1987 - 1.27
1981 - 7.02	1988 - 1.39
1982 - 4.96	1989 - 1.32
1983 - 2.73	1990 - 0.39
	1991 - 0.78

In 1988, '89, and '90 other species of individual fish were collected in addition to catfish and a summary of that data follows.

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Year	Species	PCB Conc. in ppm (individual fish)
1988	Flathead Catfish	2.97 (10)
	White Catfish	1.28 (2)
	Blue Catfish	2.20 (3)
	Smallmouth Buffalo	12.8 (6)
	Stripped Bass	3.21 (5)
	Largemouth Bass	0.50 (8)
	White Bass	2.80 (3)
	Black Crappie	0.74 (8)
	White Crappie	0.50 (4)
1989	Smallmouth Buffalo	7.05 (31)
	Stripped Bass	5.20 (14)
1990	Smallmouth Buffalo	13.09 (49)

In 1991, EPD began to institute a statewide monitoring plan for fish tissue. As a part of that strategy, fillet tissue from three to five individual fish is composited and analyzed for 43 different contaminants, including PCBs. The goal of the monitoring strategy is to provide at least 3 composites of each species tested, and to test at least two important indicator species at each location. Samples have been collected from the Coosa, Etowah, and Oostanaula Rivers during the 1990's using this strategy.

Between 1977 and 1991, the number of individual fish collected in this area for analyses was approximately 650. From 1991 to the present, approximately 122 composites were collected representing more than 600 fish. In total, well over 1200 fish have been analyzed in this area to access contamination. All of EPD's newer composite data for the Coosa, Etowah, Oostanalula, and Conasauga is attached as a separate file at the end of this memo.

The composite collection strategy implemented in 1991 was designed to facilitate development of consumption guidelines and not trend analysis. However, a review of mean concentrations over time by species does suggest that for most species there have been clear declines in PCB concentrations continuing through the 1990's to present. Additionally, this is supported by the decline in degree of severity of our consumption guidelines in the area. For five species of fish in two stretches of the Coosa there is currently only one species (smallmouth buffalo) with a "do not eat" recommendation. In 1997, for comparison, there were three species with "do not eat" recommendations. Those species were smallmouth buffalo, striped bass, and channel catfish.

In reviewing our newer data, there is only one instance where there is some question as to whether PCB concentrations are continuing to decline. Composites of smallmouth buffalo reported in '01 and '03 near Rome (River mile

2) were found to contain average concentrations of 1.23 and 1.45 ppm PCBs, respectively. Those values are higher than smallmouth buffalo collected in areas of the Coosa downstream, or the Etowah and Oostanaula rivers in the last several years. Smallmouth buffalo collected near the confluence of the Etowah and Oostanaula in '94 were lower (0.74 ppm PCBs), but the samples may have contained fish that resided primarily above Rome. There are no good data from the early to mid-nineties to compare to the '01 and '03 data near river mile 2. The exact locations within the Coosa where the smallmouth buffalo were collected in '88, '89 and '90 are unknown, but overall averages for PCBs were much higher (between 7 and 13 ppm).

U.S. EPA collected and analyzed five individual fish from two species at three locations on the Coosa in fall '02. That data is shown below.

Location	Species	Mean Arochlor 1260 (interpret as PCB total) in ppm
Rome, river mile 2	spotted bass	0.54
	smallmouth buffalo	1.10
Below Hwy 100	largemouth bass	0.10
	smallmouth buffalo	0.71
Brushy Branch	largemouth bass	0.41
	smallmouth buffalo	0.14

U.S. EPA's data for smallmouth buffalo collected in the vicinity of Rome in the fall of '02 is greater than 1 ppm (as is ours). The smallmouth buffalo (both U.S. EPA's and EPD's '03) have higher PCB concentrations than other fish collected in the area, but does show a declining trend down the river. However, these are small numbers of individual fish.

Important Points To Remember

Most species show declining concentrations of PCBs over time, and with distance away from Rome.

Smallmouth buffalo appear to decline through 90's (when one considers very high values of '88-'90). Concentrations at present (0.5 or 1.5) are dramatically lower than those present in 1990 (> 13.0 ppm)

Age, size and time of collection which are issues that have not been discussed here due to limited time, may play a significant role in year to year variation in fish collected, especially in a species that lives to be very old with high lipid content like smallmouth buffalo.

Conasauga River Analysis

Location	Fiscal Year	Common Name	Sample ID	Analyte Detected?	PCB Conc (ppm)	Composites (N)	# Fish	Mean Length (in)	Mean Weight (lbs)
Below Dalton, Old Tilton Bridge	1992	Carp, Common	WQ0177	No	0.10	1	6	16.06	1.80
		Carp, Common	Totals	0/1	0.10	1	6	16.06	1.80
			FY 1992 Summary	0/1	0.10	1	6	16.06	1.80
Below Dalton, Old Tilton Bridge	1999	Bass, White	AC71409	Yes	0.49	1	5	10.30	0.48
	1999	Bass, White	AC71410	Yes	0.63	1	5	10.23	0.50
	1999	Bass, White	AC71411	Yes	0.45	1	5	9.35	0.37
		Bass, White	Totals	3/3	0.52	3	15	9.96	0.45
Below Dalton, Old Tilton Bridge	1999	Buffalo, Smallmouth	AC71412	Yes	0.29	1	5	15.98	1.98
	1999	Buffalo, Smallmouth	AC71413	Yes	0.55	1	5	16.15	2.23
	1999	Buffalo, Smallmouth	AC71414	Yes	0.47	1	5	16.98	2.36
		Buffalo, Smallmouth	Totals	3/3	0.44	3	15	16.37	2.19
			FY 1999 Summary	6/6	0.48	6	30	13.17	1.32

Location	Fiscal Year	Common Name	Sample ID	Analyte Detected?	PCB Conc (ppm)	Composites (N)	# Fish	Mean Length (in)	Mean Weight (lbs)
GA Hwy 2	2002	Buffalo, Smallmouth	P01.1796	Yes	0.27	1	5	20.67	4.14
	2002	Buffalo, Smallmouth	P01.1797	Yes	0.58	1	5	17.94	2.61
	2002	Buffalo, Smallmouth	P01.1798	Yes	0.19	1	5	16.20	1.77
		Buffalo, Smallmouth	Totals	3/3	0.35	3	15	18.27	2.84
GA Hwy 2	2002	Crappie, Black	P01.1799	No	0.03	1	3	11.47	0.76
	2002	Crappie, Black	P01.1800	No	0.03	1	3	9.75	0.43
		Crappie, Black	Totals	0/2	0.03	2	6	10.61	0.59
GA Hwy 2	2002	Bass, Spotted	P01.1801	No	0.03	1	3	17.60	2.71
	2002	Bass, Spotted	P01.1802	No	0.03	1	3	11.68	0.64
		Bass, Spotted	Totals	0/2	0.03	2	6	14.64	1.68
			FY 2002 Summary	3/7	0.17	7	27	15.04	1.87

Oostanaula River Analysis

Location	Fiscal Year	Common Name	Sample ID	Analyte Detected?	PCB Conc (ppm)	Composites (N)	# Fish	Mean Length (in)	Mean Weight (lbs)
GA Hwy 140	1994	Bass, Spotted	P93.2909	No	0.03	1	5	8.70	0.32
GA Hwy 140	1994	Bass, Spotted	P93.2910	Yes	0.07	1	4	12.20	0.80
GA Hwy 140	1994	Bass, Spotted	P93.2911	No	0.03	1	5	16.73	2.48
		Bass, Spotted	Totals	1/3	0.04	3	14	12.55	1.20
GA Hwy 140	1994	Sunfish, Bluegill	P93.2906	No	0.03	1	5	7.51	0.31
GA Hwy 140	1994	Sunfish, Bluegill	P93.2907	No	0.03	1	5	6.65	0.19
GA Hwy 140	1994	Sunfish, Bluegill	P93.2908	No	0.03	1	5	5.94	0.13
		Sunfish, Bluegill	Totals	0/3	0.03	3	15	6.70	0.21
				FY 1994 Summary		1/6	0.04	6	29 9.62 0.71
GA Hwy 140	1996	Bass, Largemouth	AB08638	Yes	0.16	1	4	15.81	2.17
GA Hwy 140	1996	Bass, Largemouth	AB08639	Yes	0.17	1	2	12.34	0.73
		Bass, Largemouth	Totals	2/2	0.17	2	6	14.07	1.45
GA Hwy 140	1996	Buffalo, Smallmouth	AB08603	Yes	0.10	1	5	15.95	2.07
GA Hwy 140	1996	Buffalo, Smallmouth	AB08604	Yes	0.98	1	5	18.11	2.83
GA Hwy 140	1996	Buffalo, Smallmouth	AB08605	Yes	0.85	1	5	20.14	4.04
		Buffalo, Smallmouth	Totals	3/3	0.64	3	15	18.07	2.98
GA Hwy 140	1996	Catfish, Channel	AB08635	Yes	0.31	1	5	16.94	1.38
GA Hwy 140	1996	Catfish, Channel	AB08636	Yes	0.33	1	5	14.46	0.85
GA Hwy 140	1996	Catfish, Channel	AB08637	Yes	0.12	1	5	12.71	0.57
		Catfish, Channel	Totals	3/3	0.25	3	15	14.71	0.93
				1996	8/8	0.38	8	36	15.81 1.83
GA Hwy 140	1997	Bass, Striped	AB75307	No	0.30	1	5	22.09	3.92
		Bass, Striped	Totals	0/1	0.30	1	5	22.09	3.92
				FY 1997 Summary		0/1	0.30	1	5 22.09 3.92
GA Hwy 140	2000	Bass, Spotted	P99.1401	No	0.03	1	4	8.69	0.28
GA Hwy 140	2000	Bass, Spotted	P99.1402	No	0.03	1	4	10.33	0.47
GA Hwy 140	2000	Bass, Spotted	P99.1403	No	0.03	1	1	14.49	1.78
		Bass, Spotted	Totals	0/3	0.03	3	9	11.17	0.85
GA Hwy 140	2000	Buffalo, Smallmouth	P99.1407	No	0.03	1	5	14.91	1.75
GA Hwy 140	2000	Buffalo, Smallmouth	P99.1408	Yes	0.08	1	5	18.58	3.03
GA Hwy 140	2000	Buffalo, Smallmouth	P99.1409	Yes	0.07	1	5	16.91	2.50
		Buffalo, Smallmouth	Totals	2/3	0.06	3	15	16.80	2.43
GA Hwy 140	2000	Catfish, Channel	P99.1404	Yes	0.23	1	5	16.62	1.42
GA Hwy 140	2000	Catfish, Channel	P99.1405	No	0.03	1	5	13.29	0.69
GA Hwy 140	2000	Catfish, Channel	P99.1406	No	0.03	1	5	11.08	0.36
		Catfish, Channel	Totals	1/3	0.10	3	15	13.66	0.82
GA Hwy 140	2000	Sunfish, Bluegill	P99.1410	No	0.03	1	5	6.77	0.22
GA Hwy 140	2000	Sunfish, Bluegill	P99.1411	No	0.03	1	5	6.07	0.16
GA Hwy 140	2000	Sunfish, Bluegill	P99.1412	No	0.03	1	5	5.46	0.11
		Sunfish, Bluegill	Totals	0/3	0.03	3	15	6.10	0.16
				FY 2000 Summary		3/12	0.05	12	54 11.93 1.06
GA Hwy 140	2003	Buffalo, Smallmouth	P02.1856	Yes	0.28	1	5	16.78	2.54
GA Hwy 140	2003	Buffalo, Smallmouth	P02.1857	Yes	0.28	1	5	17.94	3.05
GA Hwy 140	2003	Buffalo, Smallmouth	P02.1858	Yes	0.30	1	5	19.62	4.04
		Buffalo, Smallmouth	Totals	3/3	0.29	3	15	18.11	3.21
				FY 2003 Summary		3/3	0.29	3	15 18.11 3.21

Location	Fiscal Year	Common Name	Sample ID	Analyte Detected?	PCB Conc (ppm)	Composites (N)	# Fish	Mean Length (in)	Mean Weight (lbs)
GA Hwy 156, Calhoun	2000	Buffalo, Smallmouth	P99.1398	No	0.03	1	5	18.98	3.62
GA Hwy 156, Calhoun	2000	Buffalo, Smallmouth	P99.1399	Yes	0.12	1	5	18.24	3.05
GA Hwy 156, Calhoun	2000	Buffalo, Smallmouth	P99.1400	Yes	0.17	1	5	15.20	2.01
		Buffalo, Smallmouth	Totals	2/3	0.11	3	15	17.48	2.90
GA Hwy 156, Calhoun	2000	Sunfish, Bluegill	P99.1395	No	0.03	1	5	7.00	0.23
GA Hwy 156, Calhoun	2000	Sunfish, Bluegill	P99.1396	No	0.03	1	5	5.92	0.13
GA Hwy 156, Calhoun	2000	Sunfish, Bluegill	P99.1397	No	0.03	1	5	5.25	0.09
		Sunfish, Bluegill	Totals	0/3	0.03	3	15	6.06	0.15
				FY 2000 Summary		2/6	0.07	6	30 11.77 1.52

Location	Fiscal Year	Common Name	Sample ID	Analyte Detected?	PCB Conc (ppm)	Composites (N)	# Fish	Mean Length (in)	Mean Weight (lbs)
Rome-Above confluence with Coosa	1997	Bass, Striped	AB75039	Yes	0.82	1	5	23.97	6.06
Rome-Above confluence with Coosa	1997	Bass, Striped	AB75041	Yes	1.12	1	5	19.27	2.57
Rome-Above confluence with Coosa	1997	Bass, Striped	AB75042	No	0.03	1	5	22.09	3.92
		Bass, Striped	Totals	2/3	0.66	3	15	21.77	4.18
				FY 1997 Summary		2/3	0.66	3	15 21.77 4.18

Etowah River Analysis

Location	Fiscal Year	Common Name	Sample ID	Analyte Detected?	PCB Conc (ppm)	Composites (N)	# Fish	Mean Length (in)	Mean Weight (lbs)
Above Lake Allatoona	1997	Bass, Spotted	AB51443	No	0.06	1	5	8.40	0.20
	1997	Bass, Spotted	AB51444	No	0.03	1	2	11.10	0.53
		Bass, Spotted	Totals	0/2	0.05	2	7	9.75	0.37
Above Lake Allatoona	1997	Redhorse, Golden	AB51440	No	0.03	1	5	15.21	1.41
	1997	Redhorse, Golden	AB51441	No	0.03	1	5	12.20	0.63
	1997	Redhorse, Golden	AB51442	No	0.03	1	5	10.20	0.38
		Redhorse, Golden	Totals	0/3	0.03	3	15	12.54	0.80
			FY 1997 Summary	0/5	0.04	5	22	11.42	0.63

Location	Fiscal Year	Common Name	Sample ID	Analyte Detected?	PCB Conc (ppm)	Composites (N)	# Fish	Mean Length (in)	Mean Weight (lbs)	
Barlow-Floyd Counties	1994	Bass, Spotted	P93.2904	No	0.03	1	3	10.50	0.56	
	1994	Bass, Spotted	P93.2905	Yes	0.13	1	4	16.95	2.45	
		Bass, Spotted	Totals	1/2	0.08	2	7	13.72	1.50	
Barlow-Floyd Counties	1994	Sunfish, Bluegill	P93.2901	No	0.03	1	5	7.43	0.32	
	1994	Sunfish, Bluegill	P93.2902	No	0.03	1	5	7.12	0.26	
	1994	Sunfish, Bluegill	P93.2903	No	0.03	1	5	6.24	0.16	
		Sunfish, Bluegill	Totals	0/3	0.03	3	15	6.93	0.25	
			FY 1994 Summary	1/5	0.05	5	22	9.65	0.75	
Barlow-Floyd Counties	2000	Bass, Spotted	P99.1413	Yes	0.27	1	5	18.09	3.09	
	2000	Bass, Spotted	P99.1414	No	0.03	1	6	13.74	1.16	
	2000	Bass, Spotted	P99.1415	No	0.03	1	4	10.38	0.46	
		Bass, Spotted	Totals	1/3	0.11	3	15	14.07	1.57	
			Catfish, Channel	P99.1416	No	0.03	1	3	14.54	1.24
			Catfish, Channel	P99.1417	No	0.03	1	3	13.33	0.73
		Catfish, Channel	P99.1418	No	0.03	1	3	10.05	0.31	
		Catfish, Channel	Totals	0/3	0.03	3	9	12.64	0.76	
			FY 2000 Summary	1/6	0.07	6	24	13.36	1.17	

Location	Fiscal Year	Common Name	Sample ID	Analyte Detected?	PCB Conc (ppm)	Composites (N)	# Fish	Mean Length (in)	Mean Weight (lbs)
Below Lake Allatoona	1997	Bass, Striped	AB75045	No	0.09	1	5	25.27	5.67
	1997	Bass, Striped	AB75048	No	0.09	1	5	23.67	4.81
	1997	Bass, Striped	AB75051	No	0.09	1	5	23.54	5.29
		Bass, Striped	Totals	0/3	0.09	3	15	24.16	5.26
			FY 1997 Summary	0/3	0.09	3	15	24.16	5.26

Location	Fiscal Year	Common Name	Sample ID	Analyte Detected?	PCB Conc (ppm)	Composites (N)	# Fish	Mean Length (in)	Mean Weight (lbs)
Below Thompson-Weiman Chemical Company	2001	Buffalo, Smallmouth	P00.2409	Yes	0.48	1	3	22.99	6.14
	2001	Buffalo, Smallmouth	P00.2410	Yes	0.18	1	4	17.69	2.86
	2001	Buffalo, Smallmouth	P00.2411	Yes	0.36	1	4	15.77	2.13
		Buffalo, Smallmouth	Totals	3/3	0.34	3	11	18.82	3.71
			FY 2001 Summary	3/3	0.34	3	11	18.82	3.71

Location	Fiscal Year	Common Name	Sample ID	Analyte Detected?	PCB Conc (ppm)	Composites (N)	# Fish	Mean Length (in)	Mean Weight (lbs)
Kelly Bridge Road	1999	Redhorse, Blacktail	AC58143	No	0.06	1	5	10.11	0.33
	1999	Redhorse, Blacktail	AC58144	No	0.06	1	5	11.08	0.44
	1999	Redhorse, Blacktail	AC58145	No	0.06	1	5	13.30	0.83
		Redhorse, Blacktail	Totals	0/3	0.06	3	15	11.50	0.53
			FY 1999 Summary	0/3	0.06	3	15	11.50	0.53

Location	Fiscal Year	Common Name	Sample ID	Analyte Detected?	PCB Conc (ppm)	Composites (N)	# Fish	Mean Length (in)	Mean Weight (lbs)
Lake Allatoona Dam to Rome, GA	1996	Buffalo, Smallmouth	P95.0378	Yes	1.80	1	5	18.73	3.34
	1996	Buffalo, Smallmouth	P95.0379	Yes	1.08	1	5	17.41	2.61
	1996	Buffalo, Smallmouth	P95.0380	Yes	0.61	1	5	16.15	2.28
		Buffalo, Smallmouth	Totals	3/3	1.16	3	15	17.43	2.75
			FY 1996 Summary	3/3	1.16	3	15	17.43	2.75

Location	Fiscal Year	Common Name	Sample ID	Analyte Detected?	PCB Conc (ppm)	Composites (N)	# Fish	Mean Length (in)	Mean Weight (lbs)
US Hwy 411	1992	Bass, Largemouth	WQ0142	Yes	0.10	1	2	19.70	4.01
		Bass, Largemouth	Totals	1/1	0.10	1	2	19.70	4.01
US Hwy 411	1992	Bass, Spotted	WQ0148	Yes	0.16	1	1	14.65	1.35
		Bass, Spotted	Totals	1/1	0.16	1	1	14.65	1.35
US Hwy 411	1992	Catfish, Channel	WQ0143	No	0.10	1	6	15.20	0.95
	1992	Catfish, Channel	WQ0144	No	0.10	1	6	17.09	1.00
	1992	Catfish, Channel	WQ0145	No	0.10	1	6	18.20	1.83
	1992	Catfish, Channel	WQ0146	No	0.10	1	6	19.07	2.09
	1992	Catfish, Channel	WQ0147	No	0.10	1	6	19.93	2.70
		Catfish, Channel	Totals	0/5	0.10	5	30	17.90	1.84
			FY 1992 Summary	2/7	0.11	7	33	17.69	2.08
2003	2003	Buffalo, Smallmouth	P02.1859	Yes	0.34	1	5	15.79	1.84
	2003	Buffalo, Smallmouth	P02.1860	Yes	0.64	1	5	16.17	2.07
	2003	Buffalo, Smallmouth	P02.1861	Yes	0.8	1	5	17.20	2.46
		Buffalo, Smallmouth	Totals	3/3	0.59	3	15	16.39	2.12
			FY 2003 Summary	3/3	0.59	3	15	16.39	2.12

Coosa River Analysis

Location	Fiscal Year	Common Name	Sample ID	Analyte Detected?	PCB Conc (ppm)	Composites (N)	# Fish	Mean Length (in)	Mean Weight (lbs)	
Confluence of Etowah and Oostanaula to Hwy 100	1994	Bass, Largemouth	P93.0012	No	0.03	1	5	14.24	1.55	
	1994	Bass, Largemouth	P93.0013	Yes	0.38	1	5	16.57	2.53	
	1994	Bass, Largemouth	P93.0014	Yes	0.60	1	5	18.59	3.74	
		Bass, Largemouth	Totals		0.34	3	15	16.47	2.61	
Confluence of Etowah and Oostanaula to Hwy 100	1994	Buffalo, Smallmouth	P93.0015	Yes	0.13	1	4	13.41	1.28	
	1994	Buffalo, Smallmouth	P93.0016	Yes	0.56	1	3	16.06	2.17	
	1994	Buffalo, Smallmouth	P93.0017	Yes	2.75	1	3	20.64	4.90	
		Buffalo, Smallmouth	Totals	3/3	1.15	3	10	16.70	2.78	
				FY 1994 Summary	5/6	0.74	6	25	16.59	2.69
Confluence of Etowah	1997	Bass, Striped	AB75036	No	0.15	1	1	36.61	22.71	
	1997	Bass, Striped	AB75055	Yes	0.78	1	5	17.09	2.41	
	1997	Bass, Striped	AB75056	Yes	0.91	1	5	22.33	5.19	
		Bass, Striped	Totals	2/3	0.61	3	11	25.35	10.10	
				FY 1997 Summary	2/3	0.61	3	11	25.35	10.10
Location	Fiscal Year	Common Name	Sample ID	Analyte Detected?	PCB Conc (ppm)	Composites (N)	# Fish	Mean Length (in)	Mean Weight (lbs)	
Hwy 100 to Stateline	1995	Catfish, Channel	P94.2372	Yes	0.28	1	5	16.45	1.25	
	1995	Catfish, Channel	P94.2373	Yes	0.29	1	5	11.93	0.42	
	1995	Catfish, Channel	P94.2374	Yes	0.20	1	5	11.15	0.34	
		Catfish, Channel	Totals	3/3	0.26	3	15	13.18	0.67	
				FY 1995 Summary	3/3	0.26	3	15	13.18	0.67
Hwy 100 to Stateline	1996	Bass, Spotted	P95.0384	No	0.03	1	5	9.62	0.38	
	1996	Bass, Spotted	P95.0385	Yes	0.10	1	5	12.80	0.93	
	1996	Bass, Spotted	P95.0386	No	0.03	1	3	15.35	1.82	
		Bass, Spotted	Totals	1/3	0.05	3	13	12.59	1.05	
Hwy 100 to Stateline	1996	Catfish, Channel	P95.0381	Yes	0.16	1	5	10.10	0.25	
	1996	Catfish, Channel	P95.0382	Yes	0.10	1	5	11.31	0.36	
	1996	Catfish, Channel	P95.0383	Yes	2.40	1	5	14.16	0.70	
		Catfish, Channel	Totals	3/3	0.89	3	15	11.86	0.47	
				FY 1996 Summary	4/6	0.47	6	28	12.22	0.76
Hwy 100 to Stateline	1999	Bass, Largemouth	AC71420	Yes	0.17	1	5	14.72	1.66	
	1999	Bass, Largemouth	AC71421	Yes	0.21	1	5	13.02	1.19	
	1999	Bass, Largemouth	AC71422	No	0.06	1	5	11.92	0.83	
		Bass, Largemouth	Totals	2/3	0.15	3	15	13.22	1.23	
Hwy 100 to Stateline	1999	Bass, Striped	AC71423	Yes	1.03	1	3	25.88	7.91	
	1999	Bass, Striped	AC71424	Yes	0.73	1	2	13.23	1.14	
		Bass, Striped	Totals	2/2	0.88	2	5	19.55	4.53	
Hwy 100 to Stateline	1999	Buffalo, Smallmouth	AC71415	Yes	0.77	1	3	20.98	5.87	
	1999	Buffalo, Smallmouth	AC71416	No	0.06	1	3	14.92	1.85	
		Buffalo, Smallmouth	Totals	1/2	0.41	2	6	17.95	3.86	
Hwy 100 to Stateline	1999	Catfish, Channel	AC71417	Yes	0.53	1	5	14.53	0.81	
	1999	Catfish, Channel	AC71418	Yes	0.27	1	5	11.63	0.48	
	1999	Catfish, Channel	AC71419	Yes	0.13	1	5	10.94	0.32	
		Catfish, Channel	Totals	3/3	0.31	3	15	12.36	0.53	
				FY 1999 Summary	8/10	0.40	10	41	15.18	2.21
Hwy 100 to Stateline	2003	Buffalo, Smallmouth	P02.1862	Yes	0.82	1	3	20.79	5.01	
	2003	Buffalo, Smallmouth	P02.1863	No	0.03	1	5	14.28	1.57	
	2003	Buffalo, Smallmouth	P02.1864	No	0.03	1	5	12.35	1.02	
		Buffalo, Smallmouth	Totals	1/3	0.29	3	13	15.81	2.53	
				FY 2003 Summary	1/3	0.29	3	13	15.81	2.53
Location	Fiscal Year	Common Name	Sample ID	Analyte Detected?	PCB Conc (ppm)	Composites (N)	# Fish	Mean Length (in)	Mean Weight (lbs)	
River Mile 2, Rome	2001	Bass, Spotted	P00.2415	Yes	0.28	1	4	16.43	2.19	
	2001	Bass, Spotted	P00.2416	Yes	0.12	1	4	12.79	1.38	
	2001	Bass, Spotted	P00.2417	Yes	0.21	1	4	9.69	0.48	
		Bass, Spotted	Totals	3/3	0.20	3	12	12.97	1.35	
River Mile 2, Rome	2001	Buffalo, Smallmouth	P00.2412	Yes	1.22	1	5	20.57	4.60	
	2001	Buffalo, Smallmouth	P00.2413	Yes	1.51	1	5	19.53	4.16	
	2001	Buffalo, Smallmouth	P00.2414	Yes	0.97	1	5	15.91	2.32	
		Buffalo, Smallmouth	Totals	3/3	1.23	3	15	18.67	3.70	
River Mile 2, Rome	2001	Catfish, Blue	P00.2418	Yes	0.61	1	5	20.60	3.02	
	2001	Catfish, Blue	P00.2419	Yes	0.11	1	5	17.82	1.70	
	2001	Catfish, Blue	P00.2420	No	0.27	1	5	15.91	1.40	
		Catfish, Blue	Totals	2/3	0.33	3	15	18.11	2.04	
River Mile 2, Rome	2001	Crappie, Black	P00.2421	Yes	0.05	1	1	12.40	1.24	
		Crappie, Black	Totals	1/1	0.05	1	1	12.40	1.24	
				FY 2001 Summary	9/10	0.54	10	43	16.16	2.25
River Mile 2, Rome	2003	Buffalo, Smallmouth	P02.1865	Yes	1.00	1	5	15.28	1.91	
	2003	Buffalo, Smallmouth	P02.1866	Yes	1.85	1	5	16.52	2.65	
	2003	Buffalo, Smallmouth	P02.1867	Yes	1.50	1	5	18.74	3.53	
		Buffalo, Smallmouth	Totals	3/3	1.45	3	15	16.85	2.70	
				FY 2003 Summary	3/3	1.45	3	15	16.85	2.70
Location	Fiscal Year	Common Name	Sample ID	Analyte Detected?	Analyte Conc (ppm)	Composites (N)	# Fish	Mean Length (in)	Mean Weight (lbs)	
Below Horseleg Creek	2003	Catfish, Blue	P02.1868	Yes	3.60	1	1	27.56	7.26	
		Catfish, Blue	Totals	1/1	3.60	1	1	27.56	7.26	
				FY 2003 Totals	1/1	3.60	1	1	27.56	7.26